

## ABSTRACT

In a photomask blank comprising a light-shielding film  
5 and an antireflective film on a transparent substrate, the  
light-shielding film and the antireflective film are formed  
of a chromium base material containing oxygen, nitrogen and  
carbon such that the content of carbon decreases stepwise or  
continuously from a surface side toward the substrate. The  
10 photomask blank can be etched at a controlled rate to  
produce perpendicular walls. A photomask is manufactured by  
lithographically patterning the photomask blank. The  
photomask blank and photomask have uniform film properties  
and contribute to the microfabrication of semiconductor ICs  
15 of greater density and finer feature size.